

**U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)**

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation. Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HGGRD	THREE	HGGRD3.HGGRD	TWO	24 JUL 14	25 June 2015

TYPE: RNAV SID

DP ROUTE DESCRIPTION:

TAKEOFF RWYS 2L/C/R: CLIMB HEADING 021.00 OR ASSIGNED ATC HEADING, THENCE...
TAKEOFF RWY 13: CLIMB HEADING 136.00 OR ASSIGNED ATC HEADING, THENCE...
TAKEOFF RWYS 20L/C/R: CLIMB HEADING 201.00 OR ASSIGNED ATC HEADING, THENCE...
TAKEOFF RWY 31: CLIMB HEADING 316.00 OR ASSIGNED ATC HEADING, THENCE...

...EXPECT RADAR VECTORS TO MERRL, THEN ON TRACK 316.76 TO HGGRD. MAINTAIN 4000. EXPECT CLEARANCE TO FILED ALTITUDE WITHIN FIVE (5) MINUTES AFTER DEPARTURE.

TRANSITION ROUTES (GRAPHIC DEPICTION ONLY):

Transition Name	Transition Computer Codes	From FIX/NAVAID	To FIX/NAVAID	Course	Distance	MEA	MOCA	Crossing Altitudes/Fixes
TINGS	HGGRD3.TINGS	HGGRD	TINGS	TRACK 317.81	41.67	18000	2100	

PROCEDURAL DATA NOTES/TAKEOFF MINIMUMS:

NOTE: DME/DME/IRU OR GPS REQUIRED. **NOTE:** RNAV 1. **NOTE:** RADAR REQUIRED. **NOTE:** FOR TURBOJET AIRCRAFT ONLY.
NOTE: TRANSPONDER CODE WILL BE ISSUED VIA PDC OR NASHVILLE CLEARANCE DELIVERY.
NOTE: IF UNABLE TO ACCEPT CLIMB RATES, ADVISE ATC ON INITIAL CONTACT.

TAKEOFF MINIMUMS:

RWY 2C, 2L, 2R, 13, 20L, 31, STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1100.
RWY 20C, 20R, STANDARD WITH MINIMUM CLIMB OF 500 FT PER NM TO 1300.

TAKEOFF OBSTACLES NOTES:

RWY 2L, TREES BEGINNING 203 FT FROM DER, 489 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/576 FT MSL.
RWY 13, BLAST FENCE OBSTRUCTION LIGHT 335 FT FROM DER, 64 FT LEFT OF CENTERLINE, 6 FT AGL/595 FT MSL. TREES BEGINNING 2852 FT FROM DER, 28 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/685 FT MSL. POLE 3761 FT FROM DER, 726 FT RIGHT OF CENTERLINE, 60 FT AGL/689 FT MSL.
RWY 20C, TREES BEGINNING 2089 FT FROM DER, 934 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/623 FT MSL.
RWY 20L, TREES BEGINNING 1844 FT FROM DER, 720 FT LEFT OF CENTERLINE, UP TO 60 FT AGL/639 FT MSL.
RWY 20R, FLAGPOLE 1298 FT FROM DER, 777 FT RIGHT OF CENTERLINE, 37 FT AGL/636 FT MSL. BLDG 2183 FT FROM DER, 1083 FT RIGHT OF CENTERLINE, 91 FT AGL/680 FT MSL.
RWY 31, GROUND 2 FT FROM DER, 498 FT LEFT OF CENTERLINE, 541 FT MSL. LOC OBSTRUCTION LIGHT 303 FT FROM DER, ON CENTERLINE, 48 FT AGL/547 FT MSL. BLAST FENCE OBSTRUCTION LIGHT 382 FT FROM DER, 50 FT LEFT OF CENTERLINE, 30 FT AGL/569 FT MSL. TREES BEGINNING 789 FT FROM DER, 331 FT RIGHT OF CENTERLINE, UP TO 60 FT AGL/602 FT MSL. POLE 1012 FT FROM DER, 429 FT LEFT OF CENTERLINE, 29 FT AGL/578 FT MSL. TRANSMISSION TOWER 1882 FT FROM DER, 219 FT RIGHT OF CENTERLINE, 61 FT AGL/610 FT MSL. POLE 2037 FT FROM DER, 422 FT RIGHT OF CENTERLINE, 47 FT AGL/596 FT MSL. TRANSMISSION TOWER 2778 FT FROM DER, 83 FT LEFT OF CENTERLINE, 91 FT AGL/630 FT MSL.



U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation.
 Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HGGRD	THREE	HGGRD3.HGGRD	TWO	24 JUL 14	25 June 2015

CONTROLLING OBSTACLES:

RWY 31: 2049 FT MSL TOWER (KJWNT0151) 360827.45N/0865156.48W.

RWY 20C, 20L, 20R: 2049 FT MSL TOWER (47-002263) 360250.42N/0864948.93W.

LOST COMMUNICATIONS PROCEDURES:

ADDITIONAL FLIGHT DATA:

REFERENCE MAG VAR: KBNA 3W EPOCH YEAR: 2010. DME/DME ASSESSMENT: SAT (RNP 2.0)

CHART: MEA/MOCA FROM MERRL TO HGGRD, 12600/2700.

CHART: TOP ALTITUDE: 4000

PILOT NAVIGATION AREA:

10 NM ARC CENTERED ON MERRL (IF), CW

FROM: POINT A (BEARING 272 TO MERRL)

TO: POINT B (BEARING 002 TO MERRL)

MINIMUM ALTITUDE - 6000

AIRPORTS SERVED:

NASHVILLE INTL

NASHVILLE, TN

COMMUNICATIONS:

ATIS, CLEARANCE DELIVERY, GROUND CONTROL, TOWER, WEST DEPARTURE CONTROL (119.35/372.0).

FIXES AND/OR NAVAIDS:



**U.S. DEPARTMENT of TRANSPORTATION – FEDERAL AVIATION ADMINISTRATION
GRAPHIC DEPARTURE PROCEDURE (DP)**

Bearings, headings, courses, tracks, and radials are magnetic. Elevation and altitudes are in feet MSL. Altitudes are minimum altitudes unless otherwise indicated. Ceilings are in feet above airport elevation.
Distances are in nautical miles. Visibilities are in statute miles or feet RVR unless otherwise indicated. Graphic depictions attached.

DP Name	Number	DP Computer Code	Superseded Number	Dated	Effective Date
HGGRD	THREE	HGGRD3.HGGRD	TWO	24 JUL 14	25 June 2015

REMARKS:

FROM 8260-15A, AMDT 8: RWY 20R TAKEOFF OBSTACLE BLDG NOT IN OBSTACLE DATABASE BUT SPECIALIST VERIFIED A LARGE BUILDING IN RECENT AERIAL PHOTOGRAPHS, SO RETAINED AS TAKEOFF OBSTACLE.

REQUIRED EFFECTIVE DATE:

ROUTINE

CHANGES:

ADDED: CHART: TOP ALTITUDE: 4000.

REASONS:

ATC REQUEST.



DEPARTURE (DATA RECORD)

DP Name HGGRD	Number THREE	DP Computer Code HGGRD3.HGGRD	Superseded Number TWO	Dated 24 JUL 14	Effective Date 25 June 2015
------------------	-----------------	----------------------------------	--------------------------	--------------------	--------------------------------

FIX/NAVAID	LAT/LONG	C	FO/FB	LEG TYPE	TC	DIST (NM)	ALTITUDE	SPEED	REMARKS
MERRL	362610.73N/0870845.83W	Y		IF					
HGGRD	364852.31N/0873818.79W	Y	FB	TF	313.76	32.85			
HGGRD	364852.31N/0873818.79W	Y		IF					HGGRD3.TINGS
TINGS	371810.87N/0881522.30W	Y	FB	TF	314.81	41.67			

